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Meridian 1

# Meridian Companion

## Programming and Provisioning Record

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# Introduction

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The *Meridian Companion Programming and Provisioning Record* contains a system information record, an Installation record and a portable users record.

A copy of this document should be kept at the customer site. Vendors involved in maintaining the Meridian Companion system should also have a copy of this document.

Use a pencil to record information that may vary and make photocopies of the tables as necessary.

## Meridian Companion documentation set

For information about deployment, refer to *Meridian Companion Site Planning Reference Manual* and *Guide to Site Planning*.

For information about installing the system, configuration programming, or maintenance programming, refer to *Meridian Companion Installation and Maintenance Guide*.

For information about customizing the Meridian Companion system using the Administration Terminal, refer to *Meridian Companion Administration Terminal and Operations Guide*.

For information about installation, operation, administration, and maintenance using Companion Manager, refer to *Companion Manager Installation and Operations Guide*.

For more information about using the Companion Deployment Tool, refer to *Companion Deployment Tool User Guide*.

For information about operating characteristics of a wireless system, refer to *Companion Diagnostic Software (CDS) User Guide*.

User guides and quick reference cards are provided with each portable telephone used with the Meridian Companion system.

For a description of 2500 features, refer to *X11 Features and Services*. For a complete list of prompts and service changes, refer to *X11 Input/Output Guide*.

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# System information record

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## Contacts

|                  |  |
|------------------|--|
| <b>Client</b>    |  |
| Company name     |  |
| Address          |  |
| Contact name     |  |
| Telephone number |  |
| Billing number   |  |
| Date received    |  |

|                  |  |
|------------------|--|
| <b>Supplier</b>  |  |
| Company name     |  |
| Address          |  |
| Contact name     |  |
| Telephone number |  |
| Invoice number   |  |
| Shipping date    |  |

|                   |  |
|-------------------|--|
| <b>Installer</b>  |  |
| Name              |  |
| Installation date |  |



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## Provisioning information

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After completing the following table, add the number of Base Stations and antennas, and enter the totals in Table 2 on page 8. From the information in the following table, total the number of Base Stations requiring RPIs and use the total to calculate RPI requirements using Table 1 on page 7.

**Note:** Use a photocopy of the following table to record your information.





## Equipment

### Determining remote power interconnect units

Use Table 1 to determine how many Base Stations need remote power interconnect (RPI) units. Record the number of RPIs required in Table 2.

**Table 1: Minimum RPI units required**

| Number of Base Stations | Number of RPI-16 and RPI-8 required |
|-------------------------|-------------------------------------|
| 1–8                     | 1 RPI-8                             |
| 9–16                    | 1 RPI-16                            |
| 17–24                   | 1 RPI-16 and 1 RPI-8                |
| 25–32                   | 2 RPI-16                            |
| 33–40                   | 2 RPI-16 and 1 RPI-8                |
| 41–48                   | 3 RPI-16                            |
| 49–56                   | 3 RPI-16 and 1 RPI-8                |
| 57–64                   | 4 RPI-16                            |
| 65–72                   | 4 RPI-16 and 1 RPI-8                |
| 73–80                   | 5 RPI-16                            |
| 81–88                   | 5 RPI-16 and 1 RPI-8                |
| 89–96                   | 6 RPI-16                            |
| 97–104                  | 6 RPI-16 and 1 RPI-8                |
| 105–112                 | 7 RPI-16                            |
| 113–120                 | 7 RPI-16 and 1 RPI-8                |
| 121–128                 | 8 RPI-16                            |

Record the number of units installed in the following table:

**Table 2: Equipment requirements**

| Date of upgrade | Quantity | Equipment                                                                                                                       |
|-----------------|----------|---------------------------------------------------------------------------------------------------------------------------------|
|                 | 1        | Companion Meridian Controller card with NTCK94 ROM daughter card that contains the software (required for all systems)          |
|                 |          | Companion Meridian radio line card                                                                                              |
|                 |          | Companion Meridian line card                                                                                                    |
|                 |          | interboard faceplate cable harness (one included with each Companion Meridian radio line card and Companion Meridian line card) |
|                 |          | Controller card bypass faceplate cable harness for systems other than Option 11 and Option 21                                   |
|                 |          | Companion Meridian radio line card maintenance cable                                                                            |
|                 |          | Companion Meridian line card maintenance cable                                                                                  |
|                 |          | straight RS-232 cable (10 feet, 25 feet)                                                                                        |
|                 | 1        | Administration Terminal, or a Remote Access Device (RAD) and an Administration PC                                               |
|                 |          | Base Stations (C1110)                                                                                                           |
|                 |          | plug-top power supplies                                                                                                         |
|                 |          | RPis (8s or 16s)                                                                                                                |
|                 |          | C3020 and C3050 portable telephones                                                                                             |
|                 |          | optional external antennas (indoor directional, indoor omnidirectional, outdoor omnidirectional; number of each type)           |
|                 |          | A0382082 lightning arrestor for each outdoor external antenna                                                                   |

**Note:** Some sites may use the Companion Diagnostic Software (CDS) to

evaluate and maintain their radios or Companion Manager to administer their Meridian Companion system.

### **Equipment requirements for sites using CDS or Companion Manager**

| <b>Date of upgrade</b> | <b>Quantity</b> | <b>Equipment</b>                                                                    |
|------------------------|-----------------|-------------------------------------------------------------------------------------|
|                        |                 | IBM PC compatible computer (Administration PC)                                      |
|                        |                 | 9600 baud Hayes compatible modem (for remote administration)                        |
|                        |                 | A/B box (for switching between local and remote access to RAD by Administration PC) |
|                        |                 | null modem cable (10 feet, 25 feet)                                                 |
|                        |                 | Remote Access Device (RAD)                                                          |



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## Installation record

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Complete the following tables after installing your Meridian Companion system.

### Companion Meridian Controller card

The Companion Meridian Controller card supports up to 15 Base Stations, up to 16 users, and either an Administration Terminal or a RAD for connecting a PC running Companion Manager. If a system uses both an Administration Terminal and a RAD, the Companion Meridian Controller card supports up to 14 Base Station.

Card number: \_\_\_\_\_

| TCM port | TCM wiring                        |                                     | Base Station label  | RPI units number or description | RPI wiring <sup>1</sup>                |                                     |
|----------|-----------------------------------|-------------------------------------|---------------------|---------------------------------|----------------------------------------|-------------------------------------|
|          | Distribution block # (Meridian 1) | Distribution block # (Base Station) |                     |                                 | Distribution block number for power #1 | Distribution block number for power |
| -00      |                                   |                                     | Admin. Term. or RAD |                                 |                                        |                                     |
| -01      |                                   |                                     |                     |                                 |                                        |                                     |
| -02      |                                   |                                     |                     |                                 |                                        |                                     |
| -03      |                                   |                                     |                     |                                 |                                        |                                     |
| -04      |                                   |                                     |                     |                                 |                                        |                                     |
| -05      |                                   |                                     |                     |                                 |                                        |                                     |
| -06      |                                   |                                     |                     |                                 |                                        |                                     |
| -07      |                                   |                                     |                     |                                 |                                        |                                     |
| -08      |                                   |                                     |                     |                                 |                                        |                                     |
| -09      |                                   |                                     |                     |                                 |                                        |                                     |
| -10      |                                   |                                     |                     |                                 |                                        |                                     |
| -11      |                                   |                                     |                     |                                 |                                        |                                     |
| -12      |                                   |                                     |                     |                                 |                                        |                                     |
| -13      |                                   |                                     |                     |                                 |                                        |                                     |
| -14      |                                   |                                     |                     |                                 |                                        |                                     |
| -15      |                                   |                                     |                     |                                 |                                        |                                     |

1. RPI wiring applies to certain configurations only. Refer to *Meridian Companion Installation and Maintenance Guide* for more information.

## Companion Meridian radio line card

Each Companion Meridian radio line card supports up to 16 Base Stations and 16 portable telephones. Use a photocopy to record your information.

Card number: \_\_\_\_\_

| TCM port | TCM wiring                        |                                     | Base Station label | RPI units number or description | RPI wiring <sup>1</sup>                |                                |
|----------|-----------------------------------|-------------------------------------|--------------------|---------------------------------|----------------------------------------|--------------------------------|
|          | Distribution block # (Meridian 1) | Distribution block # (Base Station) |                    |                                 | Distribution block # for TCM (if used) | Distribution block # for power |
| -00      |                                   |                                     |                    |                                 |                                        |                                |
| -01      |                                   |                                     |                    |                                 |                                        |                                |
| -02      |                                   |                                     |                    |                                 |                                        |                                |
| -03      |                                   |                                     |                    |                                 |                                        |                                |
| -04      |                                   |                                     |                    |                                 |                                        |                                |
| -05      |                                   |                                     |                    |                                 |                                        |                                |
| -06      |                                   |                                     |                    |                                 |                                        |                                |
| -07      |                                   |                                     |                    |                                 |                                        |                                |
| -08      |                                   |                                     |                    |                                 |                                        |                                |
| -09      |                                   |                                     |                    |                                 |                                        |                                |
| -10      |                                   |                                     |                    |                                 |                                        |                                |
| -11      |                                   |                                     |                    |                                 |                                        |                                |
| -12      |                                   |                                     |                    |                                 |                                        |                                |
| -13      |                                   |                                     |                    |                                 |                                        |                                |
| -14      |                                   |                                     |                    |                                 |                                        |                                |
| -15      |                                   |                                     |                    |                                 |                                        |                                |

1. RPI wiring applies to certain configurations only. Refer to *Meridian Companion Installation and Maintenance Guide* for more information.





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# System programming record

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## Configuration programming

### Telephony data

#### Delay to Dial

Delay to Dial is the time that occurs between the selection of an access line for an outgoing call and the transmission of the telephone number on that line. Each host switch needs a specific time to ensure that dial tone is present before transmitting the telephone number.

|               |  |
|---------------|--|
| Delay to Dial |  |
|---------------|--|

#### B03 gain value

The Meridian Companion system contains digital interconnections that establish various digital signal paths within the system. There are currently five paths. By default, the gain associated with the paths upon installation is zero. Product bulletins or other special circumstances may require the installer to adjust the gain values.

|             |  |
|-------------|--|
| PBX to CPP  |  |
| CPP to PBX  |  |
| PBX to RAD  |  |
| RAD to PBX  |  |
| TONE to PBX |  |

**Dual tone multifrequency timing**

DTMF timing, which can be changed only if the installer specified **Custom** during the country selection procedure, includes three elements: tone burst (duration of tone for each digit), interdigit time (time between sending tones for two digits), and pause time (time required to send a pause character). All three are set in milliseconds, and are set automatically upon initialization.

|                        |  |
|------------------------|--|
| <b>Tone burst</b>      |  |
| <b>Interdigit time</b> |  |
| <b>Pause time</b>      |  |

**Pulse code modulation coding**

Pulse code modulation, which can be changed only if the installer selected **Custom** during the country selection procedure, defines how quantized analog voice signals are encoded for transmission. The PCM value is set automatically to  $\mu$ -law or A-law during initialization.

|                  |  |
|------------------|--|
| <b>PCM value</b> |  |
|------------------|--|

**Mobility data**

**System LID**

Record the System Access Logical Identifier (LID) that uniquely identifies the system to the portables it supports. The System LID must have four characters (letters or numbers). When you first power up your system, the default System LID is a randomly generated value between 0500 and FFFE.

Changing the System LID disables all portables. If you change the LID on an existing system that has registered portables, you will invalidate the registration of all the portables on the system. Portables must be reregistered before they can be used with the system, or the System LID must be changed back to its previous value. Only an installer should change the System LID.

|                   |  |  |  |  |
|-------------------|--|--|--|--|
| <b>System LID</b> |  |  |  |  |
|-------------------|--|--|--|--|

**Antenna setting**

The available settings are internal or external antenna. The default at system startup is internal. Record the radios that are set to external antenna.

| Radio | Radio |
|-------|-------|
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |

**Administration set data**

**Installer password**

The Installer password allows access to Configuration, Administration and Maintenance programming. It should *not* be the same as the default password ( 0 0 0 0 ).

|                    |  |  |  |  |  |  |
|--------------------|--|--|--|--|--|--|
| Installer password |  |  |  |  |  |  |
|--------------------|--|--|--|--|--|--|

# Administration programming

## User options

### Radio loss handling

If a portable user moves out of the coverage area, a radio link may be lost. The system can be optionally programmed to transfer dropped calls to another number. A system-wide default is not required, but if it is used, it should be written below. There is a maximum of 16 digits.

If you do want to use a default number, circle Default and write the telephone number you program to be the system-wide default. If you do not want to use a default number, circle None. If a user wants to use a unique number (an office number, for example) record it in Table 3 under “Radio loss handling”.

|                |      |         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------|------|---------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Default number | None | Default |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------|------|---------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

## Passwords

### Administration password

The Administration password allows access to Administration programming. It should *not* be the same as the default password ( 9 9 9 9 ).

|                         |  |  |  |  |  |  |
|-------------------------|--|--|--|--|--|--|
| Administration password |  |  |  |  |  |  |
|-------------------------|--|--|--|--|--|--|

### Registration password

The Registration password allows portable registration. It should *not* be the same as the default password ( 7 2 3 4 6 ).

|                       |  |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|
| Registration password |  |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|

## Maintenance programming

### Event/Alarm log

Record the event and alarm codes and the action taken.

| Alarm/Event | Time and date | Action taken |
|-------------|---------------|--------------|
|             |               |              |
|             |               |              |
|             |               |              |
|             |               |              |
|             |               |              |
|             |               |              |
|             |               |              |
|             |               |              |
|             |               |              |
|             |               |              |
|             |               |              |
|             |               |              |
|             |               |              |
|             |               |              |
|             |               |              |



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## Portable user information

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Use Table 3 to record information about the portables for your system.

**Note 1:** Use a printout showing the user's class of service features to assist in filling out the CLS column.

**Note 2:** Use a photocopy of Table 3 to record your information.



**Table 3: Portable user information**

| WTN  | User name | Portable directory number | CLS | Radio loss handling | Meridian Companion CLS  |           |
|------|-----------|---------------------------|-----|---------------------|-------------------------|-----------|
|      |           |                           |     |                     | MCRA/MCRD/not available | CLID/CPND |
| __00 |           |                           |     |                     |                         |           |
| __01 |           |                           |     |                     |                         |           |
| __02 |           |                           |     |                     |                         |           |
| __03 |           |                           |     |                     |                         |           |
| __04 |           |                           |     |                     |                         |           |
| __05 |           |                           |     |                     |                         |           |
| __06 |           |                           |     |                     |                         |           |
| __07 |           |                           |     |                     |                         |           |
| __08 |           |                           |     |                     |                         |           |
| __09 |           |                           |     |                     |                         |           |
| __10 |           |                           |     |                     |                         |           |
| __11 |           |                           |     |                     |                         |           |
| __12 |           |                           |     |                     |                         |           |
| __13 |           |                           |     |                     |                         |           |
| __14 |           |                           |     |                     |                         |           |
| __15 |           |                           |     |                     |                         |           |



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